**Ch 1 Organisations & Data Management**

# Collecting data online, p 3

1. **Why do organisations collect data?**

Organisations collect data to shorten the time required to fill out forms. By using a database, it removed some degree of the paperwork needed.

1. **Explain the advantages to be gained from collecting data online in terms of both efficiency and effectiveness.**

Efficiency improves when customers enter their own data. For example, time and effort are saved because the double handling of forms is no longer required, so money can be saved because extra staff members are not needed for data entry.

Effectiveness is also improved when the customer enters their own data. It makes it easier to read because they don’t have to worry about the handwriting and messiness, and since the customer is typing their data themselves and directly, it insures that the measure is correct.

1. **How required fields are generally indicated on an online form and why do organisations do this?**

Required fields are generally indicated on an online form with as asterisk (\*). Organisations do this because it to ensure that all information needed is inserted.

1. **What is a potential problem with direct input?**

A potential problem with direct input is that a customer can input incorrect data (such as incorrect email addresses), which may have may not be picked up by electronic validation.

1. **What other advantages are there for businesses in a global economy?**

Some advantages about for businesses in a global economy are that it opens economies that were closed to people, unless they travelled and purchased goods and services overseas. It also provides businesses with marketing opportunities with an expanded customer base. Potential customers can come from anywhere in the world, rather than being limited to their local community.

1. **What other services are provided by businesses online?**

There are a wide range of ongoing services that are provided by organisations after a purchase. A common example of this is the ability to track information that allows you to view the processing of your order and where it is in transit right up until the moment it arrives at your house. Other outgoing services may include the electronic interactions concerning a returned item (email forms or emails) or online booking systems where a range of organisations will be alerted to and respond to your bookings (such as booking flights or hotels).

# Why users supply data for online transactions, p 5

1. **Elaborate under each of the following headings:**
   1. **Convenience**

Convenience is the ability to do normal, everyday things (like food shopping or paying bills) online if the user is unable to do these things in shops.

* 1. **Variety of choice**

Variety of choice is where online services may have a wider variety of goods available than what may be accessible locally. Also, users are able to access stores worldwide, which gives the users the ability to purchase goods regardless of where they originated.

* 1. **Reducing costs**

If people cannot afford the costs associated with shopping in-store (parking fees and fuel) it may be easier for the consumer to shop online as most online stores deliver so customers will not have to collect the items.

# Techniques used by organisations to acquire data online, p 9

1. **Prior to web based forms, how did organisations collect data?**

Before web based forms organisations had to ask customers to fill our paper forms in order to collect information. the data on these forms were them typed by a data-entry operator who would transfer the data acquired into a database.

1. **What is the role of data acquisition software?**

The role of data acquisition software is to make online transactions as easy as possible for users in which, organisers go to great trouble to design appropriate user experiences (UX) that improve on the manual methods once used.

# User flow diagrams, p 11

1. **What is the purpose of a user flow diagram?**

A user flow diagram (UFD) depicts the pathways (or steps) a user will follow to complete a transaction. The UFD mat show the ‘screens’, but now their detail and the different entry points to the online solution.

1. **In using a UFD what is important?**

Whilst using a UFD it is important to clearly show the multiple entry points that could get a user to the beginning of the transaction and the key data flows or interactions they must go through to complete the transaction.

# Techniques for efficient and effective online data collection, p 13.

1. **List some techniques for efficient and effective online data collection.**

Some techniques for efficient and effective online data collection are:

* Keep it short 🡪 only include a few questions on each screen and break large sets of questions into separate screens.
* Use clear labels that are easy to understand.
* Appropriate field types 🡪 for example, use a tick box for True/False answers, or a dropdown list where a set of radio buttons would take up too much space or be unwieldy.
* Allow the computer to format data, such as phone numbers, to increase readability.
* Map clear paths to completion 🡪 set out the form in a logical and linear manner – a single column is preferred.

1. **What tool is used to design a form prior to creating a data collection screen?**

A layout diagram is used to design a form prior to creating a data collection screen. This shows how you have included security and incorporated features that add to the efficiency and effectiveness of the data collection process.

# Design Principles, p 15

1. **To be efficient and effective a data collection form needs to conform to design principles of appearance and functionality; briefly elaborate under each of the following:**
   1. **Appearance:**
      1. **Alignment**

Alignment avoids an unprofessional, random look to the placement of objects on the screen.

* + 1. **Repetition**

Repetition is used to unify elements of a layout. This is achieved by repeating patterns, textures and page elements.

* + 1. **Contrast**

Contrast is where we position elements that are dissimilar beside each other. The greater the difference between an image or text and surroundings, the more they will stand out.

* + 1. **Space**

Space is the area that separates onscreen objects. Ideally, we space objects so that they are easy to perceive, rather than overlapping and obscuring them.

* + 1. **Balance**

Visual Balance is achieved when all elements on either side of the screen or the top and the bottom of the screen are of an equal weight.

* 1. **Functionality**
     1. **Useability**
        1. **Robustness**

Robust is the support for recovery. If there is a problem or a user needs to correct data or undo an action, then the system should be able to step back then forwards again without the user having to restart the entire transaction.

* + - 1. **Flexibility**

Having a user pre-emptive solution where the user initiates and controls the actions is considered more flexible than one where the solution does all the prompting and the user merely replies.

* + - 1. **Ease of use**

If a user can control their interaction then the solution must have the ability to adapt the user interface to different requirements and needs.

* + 1. **Accessibility**
       1. **Navigation**

In terms of navigation, these are some general rules to follow:

* Help users navigate and find content. The navigation system needs to be clear, simple and intuitive.
* Ensure that navigation can also be done on keyboard-only systems.
* Give users enough time to read and use content. This is especially true of information to users about the consequences of them clicking buttons that will finalise a transaction and/or process payment.
* Use text in place of images for users who cannot perceive the images (e.g. they may be blond or do not understand the meaning of images.)
* Help users avoid and correct mistakes with clear instructions and the ability to undo errors by going back to a previous screen.
  + - 1. **Error tolerance**

Error tolerance also has a list of simple considerations:

* Make it hard for a user to make errors and avoid allowing actions that lead to errors. For example, grey out non-selectable options and ask for confirmation of major actions, such as a purchase, or a deletion of an account.
* Helps users avoid and correct mistakes with clear instructions and the ability to undo errors by going back to a previous screen.
  + - 1. **What is the purpose of following the design principles?**

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# Acquisition software, p 19

1. **Elaborate on the nature of PHP and ASP server software.**

A PHP allows the user to be in control of the information viewed. In essence, dynamic websites allows users to enter data to access text or images. Both PHP (Personal Home Page) and ASP (Active Server Page) are used to make websites dynamic and are used primarily on the server side of things. ASP is software that is based on the server.

1. **What are back-end tools?**

Back-end tools provide statistics on who visits a website. They want to know which browsers were used to visit their site, what information was commonly searched for, the location of the users, the length of their visits and which sites they came from.

1. **Describe the nature of a cookie.**

A cookie is a small file that a web server stores on the users’ computer. Cookies typically contain data about the user, such as their email addresses and browsing preferences.

1. **What is spyware?**

Spyware is software that enables a user to obtain covert information about another’s computer activities by transmitting data covertly from their hard drive.

# Protection of rights, p 20

1. **Why is it important that organisations keep data collected secure?**

Organisations need to keep their data safe in order to protect their data from being lost. This is because there is the risk of legal issues if the information is lost, and in the worst case possible, the loss of business.

1. **Elaborate on each of the following:**
   1. **Security protocols**
      1. **TLS, SSL & HTTPS**

TLS 🡪 Transport Layer Security

SSL 🡪 Secure Socket Layer

HTTPS 🡪 Hyper-Text Transfer Protocol; Encrypted, requires a username and a password to log in; which are secure (S= Secure/encrypted)

* 1. **Privacy policies**

An organisation that collects data on individuals or other organisations usually has a privacy policy about how it uses the data collected and to whom it will disclose.

* 1. **Shipping and returns policies**

Many organisations that sell goods and services online have shipping and returns policies to assist customers with how to proceed should the order not meet with their satisfaction.